

RVACHOVA, K.L.

The 3rd All-Union conference on the theory of probability and mathematical statistics. Visnyk AN UkrSSR 24 no.11:65-67 N '53. (MERA 6:12)
(Mathematical statistics--Congresses) (Probabilities--Congresses)

RVACHEV^a, Ye.L., kandidat fiziko-matematicheskikh nauk.

Development of the theory of probabilities and mathematical statistics (All-Union meeting in Kiev). Vest.AN SSSR 24 no.1: 100-102 Ja '54. (MILRA 7:1)

(Kiev--Probabilities) (Probabilities--Kiev)
(Mathematical statistics)

S. V. VACHEVA, L. A. MEDENKO, AND K. V. CHERNYAK
Institute of Mathematics
USSR Academy of Sciences
Vladivostok, USSR (N. N. Nekrasov Institute of Mathematics)

problem of comparing two empirical distributions.

Consider sets of n independent observations on a random variable with a certain distribution and $F_1(x)$ its empirical distribution function determined by the first and second order statistics. Let $D_n = \max_{1 \leq i \leq n} |F_i(x) - F_1(x)|$. Now at range all n observations in a random sequence x_1, x_2, \dots, x_n let $S_k = x_1 + \dots + x_k$. Then D_n^+ belongs to the first or second n possible permutations of S_1, S_2, \dots, S_n . This means that this argument can be repeated for D_n^- .

Thus we have the problem of finding the probability that all the possible permutations of the n observations S_1, S_2, \dots, S_n , $n \geq 0$, are equally likely so that the problem is to count the number of certain conditional paths subject always to $S_{10} = 0$. This is done by the well-known method of reflections (or images). In a previous note (Medenko and Korolyuk [same Doklady 80, 525-526 (1951); these Rev. 13, 570]) applied this method to derive the exact distributions for D_n^+ and D_n^- . Now the present authors do it for their joint distribution and its limit form. The reviewer remarks that the explicit combinatorial formulas needed for all these cases were given already by Bachelier [Calcul des probabilités, vol. 1, Gauthier-Villars, Paris, 1912, pp. 252-253]. For a recent quotation in easy notation see a paper of the reviewer [Trans Amer. Math. Soc. 268 (1972), pp. 215-216; these Rev. 10, 1, 2].

Source: Mathematical Reviews,

Vol 13 No. 8

RVACHEVA, Ye.L.

Attraction domains of multidimensional stable distributions. Nauk.
zap. Lviv. un. 29:5-44 '54.
(Probabilities)

(MLRA 10:2)

L W3L-66 EWT(m)/EWP(t)/EWP(b) TIP(c) JD
ACC NR: AF5017903 44,55 44,55 44,55 44,55
UR/0051/65/019/001/0132/0132
621.375.9:53 51 B

AUTHOR: Bakumenko, V. L.; Kozina, G. S.; Kostinskaya, T. A.; Lupachev, Ye. P.;
Rvacheva, Ye. S. 44,55 2,44,55

TITLE: Stimulated emission of praseodymium in calcium tungstate

SOURCE: Optika i spektroskopiya, v. 19, no. 1, 1965, 132, and both sides of insert
facing p. 132

TOPIC TAGS: stimulated emission, praseodymium, calcium compound, solid state laser

ABSTRACT: The authors report that laser oscillation has been obtained in calcium tungstate crystals grown by the Czochralski method and activated with trivalent praseodymium ($\text{CaWO}_4\text{-Pr}^{3+}$). The oscillations were studied in cylindrical samples about 5 mm in diameter and 40 mm long, with plane-parallel silvered ends. The transmissivity of the semitransparent end was 0.5%. The pump source was a pulsed xenon lamp with maximum flash intensity 6 kJ. The stimulated emission was observed at a wavelength of 1.047μ , corresponding to the $^1G_4 \rightarrow ^3H_4$ transition and the temperature of liquid nitrogen. The threshold pump energy for this line was 12.8 J. The crystal output emission was recorded with a photomultiplier (FEU-28) feeding a pulse oscilloscope (OK-17M). The oscillograms exhibit a spike-like structure, with a peak energy of 30 W corresponding to the maximum spike amplitude. The emitted energy was 2 mJ. Orig. art has: 3 figures.

Card 1/2

L 20916-66 EWT(1)/EWT(m)/EWP(t) IJP(c) JD/AT

ACC NR: AP6006760

SOURCE CODE: UR/0185/66/011/001/0045/0048

AUTHORS: Drozdov, V. O. (Drozdov, V. A.); Kurmashev, Sh. D.
Rvachov, O. L. (Rvachev, A. L.)ORG: Odessa Polytechnic Institute (Odes'kyy politekhnichnyy
instytut)TITLE: Infrared quenching of the photovoltaic effect in cadmium
sulfide

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 1, 1966, 45-48

TOPIC TAGS: cadmium sulfide, photoconductivity, ir photoconductivity,
ir photoconductor, luminescence quenching, crystal lattice structure,
spectral sensitivityABSTRACT: The authors investigate the effect of infrared light on
the photovoltaic effect in cadmium sulfide polycrystalline thin-film
photoelements obtained by thermal evaporation of CdS powder in vacuum
onto a copper film (substrate temperature 200C). The thickness of
the CdS film was 2 -- 5 μ , the specific conductivity was 0.1 -- 1

Card 1/2

L 20946-66
ACC NR: AP6006760

ohm-cm, and the active area of the element was 1 -- 2 cm². A monochromator (UM-2) or filters were used to monochromatize the light from an incandescent lamp. Two maxima are observed on the spectral sensitivity curve at 600 and 660 nm. The summary action of the exciting light in the region of 600 nm and of the infrared illumination between 0.8 -- 1.5 μ is not additive. The stimulating effect of infrared illumination at low intensities disappears gradually with increasing illumination and is replaced by infrared quenching of the photovoltaic effect. In the photovoltaic effect there is, unlike in the case of photoconductivity, only one maximum of infrared stimulation or quenching at 0.85 μ . The model of double optical transitions, first proposed to explain some features of the photoconductivity of CdS (Izv. AN SSSR, ser. fiz. v. 16, 81, 1952), is used to explain the experimental data. The absence of quenching at 1.4 μ could also be due to the absence of interstitial sulfur atoms in the films investigated. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 16Mar65/ ORIG REF: 005/ OTH REF: 003

Card

2/2 MJS

44095

S/185/62/007/011/012/019
D234/D308

243900

AUTHORS:

Rvachov, V.P., Vashchenko, V.I. and Berdnikov, V.P.

TITLE:

Determination of the energy of optical radiation by
means of selective receptors

PERIODICAL:

Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 11, 1962,
1226-1229

TEXT:

If the spectral sensitivity of a selective receiver
is $S(\lambda)$ and the spectral distribution of the incident radiation is
 $\epsilon(\lambda)$, the indications of the receiver will be

$$n = \alpha \int_0^{\infty} S(\lambda) \epsilon(\lambda) d\lambda$$

The indication of a nonselective ideal photoactinometer are

$$n_{ph} = \alpha \int_{380}^{710} \epsilon(\lambda) d\lambda$$

Card 1/2

S/0198/64/010/003/0291/0296

ACCESSION NR: AP4037991

AUTHOR: Mossakovs'ky, V. I. (Mossakovskiy, V. I. (Dnipropetrov'sk Kharkiv); Onyshchenko, V. I. (Dnipropetrov'sk, Kharkiv); Rvachov, V. L. (Rvachev, V. L.) (Dnipropetrov'sk, Kharkiv)

TITLE: On the use of Green functions to solve a compound problem in the theory of elasticity for a half-space

SOURCE: Prykladna mehanika, v. 10, no. 3, 1964, 291-296

TOPIC TAGS: Green function, elasticity, half-space, stress, strain, boundary value problem, boundary condition, Kelvin function, problem compound.

ABSTRACT: A compound problem of the theory of elasticity for a half-space is reduced in the end to finding two functions which are harmonic in the half-space for the compound boundary conditions. For the case where the line of separation of the boundary conditions is a circle, this problem was solved in a previous article by expansion of the unknown functions into trigonometric series, but calculation difficulties rose with increase in the numbers of harmonics. In the present article, by inversion, a Green matrix is constructed which permits obtain-

Card 1/2

RVACHVOV, A.L.

4

5617 On the Infrared Sensitivity of Copper-Oxide Photo-cells Prepared Under Reduced Pressure in the Field of a High-Frequency Induction Heater. A. I. Andrievsky and A. L. Vacharov. National Science Foundation Translation, no. 35, July 1953, 3 p. (Original in *Doklady Akademii Nauk SSSR*, v. 89, #53, p. 245.)

Studies of process of oxidation of Cu under reduced pressure showed that, depending on pressure, high-frequency gas discharge has quite an appreciable effect on oxidation process.
Graph:

BB/19/54

RVADOV, V. YA.

1-
446

538,566.2 1683
Propagation of Modulated Waves in
a Medium with Pronounced Dispersion,
S. I. Averkov & V. Ya. Ryadov. (Radio-
tekhnika i Elektronika, June 1956, Vol. 1, No. 6,
pp. 739-742.) Brief description of apparatus
and results of an experimental investigation
of the conversion of a periodic amplitude
modulation into frequency modulation due
to the propagation of an e.m. wave through
a dispersive medium.

Open
play

any
KHD

IVANOV, David Vasil'yevich; SHCHEGLOV, Valentin Fedorovich;
RVANIN, Rostislav Vasil'yevich; USANOV, P.A., red.;
KIMMEL', L.S., red. izd-va; SHIBKOVA, R.Ye., tekhn.red.

[Automation of sorting devices and bundle making machines for
lumber] Avtomatizirovannye sortirovochnye ustroistva i paketo-
formiruiushchie mashiny dlja pilomaterialov. Moskva, Gosles-
bumizdat, 1963. 67 p.
(Lumbering--Machinery)

(MIRA 16:6)

RVANTSOV, V.G.

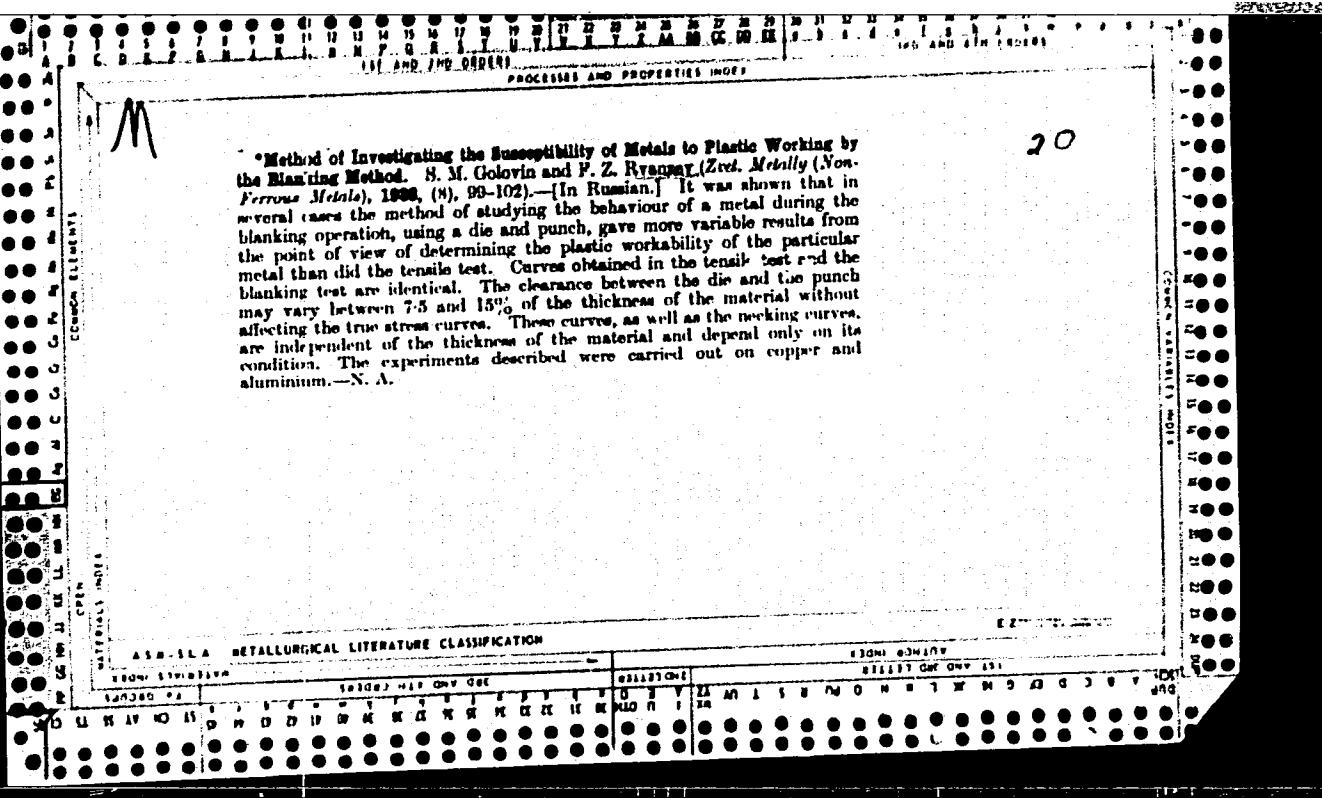
The RV-4 machine for making hollow investments cores. Biul.
tekh.-ekon. inform. no.3:21-23 '61. (MIRA 14:3)
(Coremaking)

RVAZANOV, I.P.

✓ 1254. Colorimetric determination of copper by means of ethanolamine. I. I. Rvažanov and V. I. Davydova. Ussr. Zap. Naučn. Issled. 1954, 34, 194-199; Referatnyj Zh. Khim., 1955, Abstr. No. 14,198.—Ethanolamine gives with Cu⁺ a illac - blue solution, the colour of which remains const. for 5 to 6 hr. and obeys Beer's law over the concn. range 300 to 640 µg of Cu per ml. With 2*N* ethanolamine, 19.5 µg of Cu can be detected in 1 ml. of solution (dilution 1 in 30,000); it can be determined by means of a series of standards or by colorimetric titration. To determine Cu in lead - antimony alloys, 5 g are dissolved in 30 ml. of dil. HNO₃ (1 + 4), 3 to 4 ml. of dil. H₂SO₄ (1 + 1) are added, and the PbSO₄ is filtered off after 30 min. and washed with cold 2 per cent H₂SO₄. The filtrate is evaporated just to dryness and the residue is dissolved in water. At the same time a comparison solution is prepared from dil. H₂SO₄. To each solution 5 ml. of 2*N* ethanolamine are added and the Cu in the sample is determined by colorimetric titration. The method is preferred to the pyridine - thiocyanate method. G. S. SMITH

***Method of Investigating the Susceptibility of Metals to Plastic Working by the Blanking Method.** S. M. Golovin and V. Z. Rybach. [*Zhur. Metalloobrabotki (Non-Ferrous Metals)*, 1938, (4), 99-102].—[In Russian.] It was shown that in several cases the method of studying the behaviour of a metal during the blanking operation, using a die and punch, gave more variable results from the point of view of determining the plastic workability of the particular metal than did the tensile test. Curves obtained in the tensile test and the blanking test are identical. The clearance between the die and the punch may vary between 7.5 and 15% of the thickness of the material without affecting the true stress curves. These curves, as well as the necking curves, are independent of the thickness of the material and depend only on its condition. The experiments described were carried out on copper and aluminum.—N. A.

20



*Met. Obs**V.G.**18 Working*

"The Effect of Individual Factors in Punch and Die Blanking on the Forces Required for Blanking, Stripping, Pushing Blank Through Die," by N. M. Golovin and V. Z. Ivantsov (*Tsvet. Metally (Non-Ferrous Metals)*, 1938, (1), 71-88). [In Russian.] "The forces required in the various stages of the

punch and die blanking of 70-mm.-diam. circular blanks were measured for a large number of ferrous and non-ferrous metals and alloys on sheet form. The punch diameter was in all cases 70 mm., the punch-die clearance being varied by using die diameters of from 70.015 to 70.5 mm. Two types of dies were employed, one with conically tapered opening and the other with a combined cylindrical and tapered internal surface. Using an Am-6 press, arrangements were made to measure the force on the punch against penetration into the sheet, the force required to push the cut blank out through the die, and the force required to strip the blanked sheet from the punch. In addition, the effect of the clearance on the appearance of the cut edge and on the grain of the metal adjoining the cut edge was studied. It was found that the force required for blanking is somewhat less than that which would have been expected from the value of the ultimate tensile strength. The depth to which the punch penetrates into the sheet before shearing commences corresponds to the reduction in area in the tensile test. Cutting of the sheet is possible at much larger die clearances (up to 100% of the thickness of the sheet) than has been stated by German investigators. An increase in the die clearance generally reduces the cutting force (5-10%). The depth of metal adjoining the cut edge affected by the cutting operation depends on the metal, the sheet thickness and the die clearance, increasing with the latter, and was found to vary between 20 and 110% of the sheet thickness. The cutting force relative to the total thickness decreases when a number of sheets of the same metal are blanked simultaneously. When blanking simultaneously sheets of different metals, the value of the cutting force depends on the relative position of the sheets of the different metals. The force required to push blanks through dies of the first type decreases as the pushing proceeds, but remains more or less constant in dies of the second type. In the latter, the force required to push through several blanks at the same time, as happens in practice, may be quite appreciable. The force required to strip the punched sheet from the punch was found to depend on the metal, the sheet thickness, and the die clearance. A. B."

m.a.

The Production of Hollow Cylindrical Bodies from Non-Ferrous Metals
by Cold Pressing. S. M. Golovan and F. Z. Ryapikov [U.S.S.R. Metallurgical
(Met. Ind. Herald), 1939, 19, (3), 63-67].—[In Russian.] A short review of
foreign literature. 12 references.—X. B. V.

1943

10

Removal of flux salts from castings and welded seams of
magnesium alloys. V. O. Krenig and F. Z. Rvantsev.
Russ. 51,015, April 30, 1937. The alloys are treated with
a soln. of Cr_2O_3 .

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

GENERAL SUBJECT										SUBJECT									
1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
SO	SI	SY	AY	HO	AS	O	W	7	10	20	40	X	R	E	T	I	0	2	40

RVAYEV, S.D.; YUZHASHINSKAYA, P.L.

Effect of carotonaphthalene on sugar synthesis in isolated cat liver.
Tr. Vsesoiuz. obsh. fiziol. no. 1:125-126 1952. (CIML 24:1)

1. Delivered 27 February 1950, Baku.

RVAZONOVATP

Theory of the Multisegment Magnetron. V. II.

Kalinin & T. I. Rvazonova, Izv. Akad. Nauk SSSR, Vol. 22, No. 1, p. 103, 1958. The results obtained by Sljuskin (1939 p. 1918) are further developed to cover the case when the modulation of the density of the longitudinal electron stream is taken into account. The discussion is based on the consideration of an electrical circuit equivalent to a multisegment magnetron (Fig. 1) and a general formula (12) is derived for the mean energy exchange between the electron streams and the plates during one cycle. Several particular cases are considered in detail. The theoretical conclusions are in good agreement with experimental results.

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

FVATSHEV, A. L.

"The Infra-Red Sensitivity of Copper Oxydul Photoelements Manufactured In a Vacuum
in a High Frequency Field." A. I. ANDRIYEVSKIY and A. L. FVATSHEV. "DOKLADY AKADEMII
NAUK USSR," Vol. LXXXIX No. 2/1953 pp. 245/47.

FOLDI, M.; RVE, J.; SOLTI, F.; SZABO, Gy.; ZSOLDOS, I.; KOLTAY, E.

Effect of dibenamine on antidiuresis and antisaluresis following
the decreasing of effective circulating blood volume. Acta med.
hung. 10 no.1-2:35-42 1956.

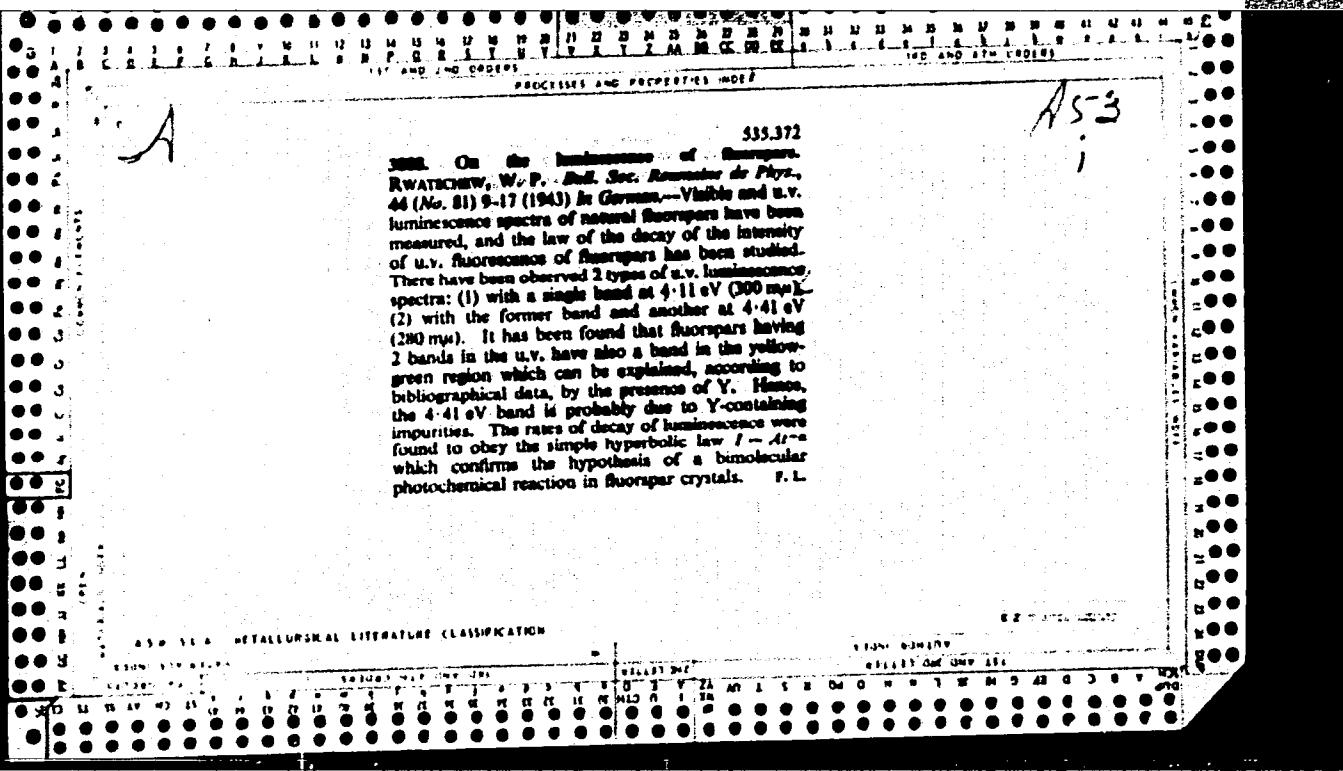
1. I. Medizinische Universitätsklinik, Budapest.
(BLOOD VOLUME

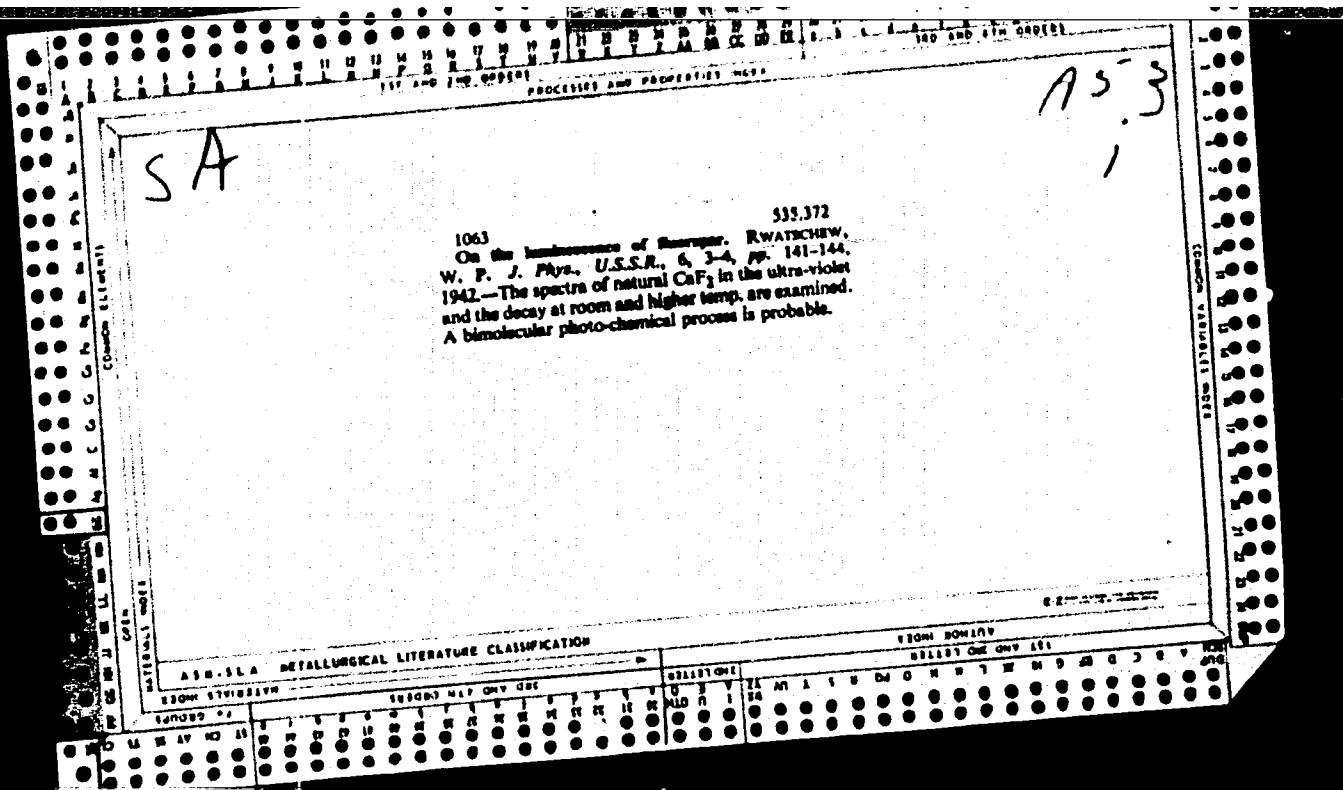
eff. of decrease of effective circulating blood volume
on diuresis, antag. of inhib. by dibenamine (Ger))

(DIURESIS, physiol.

eff. of decrease of effective circulating blood volume
& antag. of inhib. by dibenamine)

(SYMPATHOLYTICS, eff.
antag. of inhib. of diuresis by decrease of effective
circulating blood volume (Ger))





A 53
i

535 372
1963
On the luminescence of fluorapatite. RWA 310 w.
N. P. J. Phys. U.S.S.R., 6, 3-4, pp. 141-144.
1942 -- The spectra of natural CaI_2 in the ultra-violet
and the decay at room and higher temp. are examined.
A bimolecular photo-chemical process is probable.

RVMER, YU. B.

2L777. RVMER, YU. B. K Termodinamike Elektronnogo Gaza. Zhurnal Eksperim. I Teoret. Fiziki, 1949. Vyp. 8. S. 757-59.

SO: Letopis' No. 33, 1949.

GEL'D, P.V.; RYABOV, R.A.

Influence of components on the rate of hydrogen diffusion in steels
at high temperatures. Trudy kom.anal.khim. 10:27-36 '60.

(MIRA 13:8)

1. Ural'skiy politekhnicheskik institut im. S.M.Kirova, Sverdlovsk.
(Steel--Hydrogen content)
(Diffusion)

AFANAS'YEV, A., inzh.; RYABAKOV, A., inzh.; SMIRNOV, A., knad.tekhn.nauk;
TOMLYANOVICH, D., knad.tekhn.nauk.

Streetcars should have pole current collectors. Zhil-komm. khoz. 13
(MIRA 16:3)
no.2:16-17 '63.
(Streetcars—Electric equipment)

RYABAKOV, Boris Vasil'yevich; SIDOROV, V.A.; VLASOV, N.A., red.

[Spectrometry of fast neutrons] Spektrometriaia bystrykh neitronov. Pod red. N.A.Vlasova. Moskva, Izd-vo Glav. upr. po ispol'zovaniu atomnoi energii, 1958. 175 p. (MIRA 14:11)
(Neutrons)

KONOPKIN, O.A.; RYABAKOV, I.P.

Experimental conveyor for the study of work motions in man.
Vop. psichol. 6 no.5:138-139 S-0 '60. (MIRA 13:11)

1. Institut psichologii APN RSFSR.
(Conveying machinery) (Work measurement)

MAEAKOV, P.

Methods of teaching the observation and determination of distances. No 7.

Tankist, No 12, 1948.

KARAKOV, P., Col.

KARAKOV, P.-

Author of article, "Self-Propelled Artillery Mount," giving a general description and characteristics of the artillery mount. A drawing accompanies the article, pointing out 23 parts of the mount.

(Voyenkiye Znaniye, No 12, Dec 53)

SO: SUM 152, 25 June 1954

Author of article, "Against Conditionality in Tactical Training," published in Voyenny Vestnik, No 13, 1953. (VV, No 17, Dec 1953)

RYABAYA, O. M.

PA-24T62

USSR/Medicine - Rabies - Immunity
Medicine - animals, Experimentation

Oct 1947

"The Advantages of Marmots in Experimental Immunological Work on Rabies," E. M. Pugach,
O. M. Ryabaya, 2 pp.

"Byulleten' Eksperimental'noy Biologii i Meditsiny" Vol XXIV, № 4

More and more scientists and research men are using marmots (suslike) for experiments in the field of diphtheria, exanthemous typhus and rabies. Because of the excellent results obtained with these animals, it is thought that at some date in the near future these marmots will replace the smaller laboratory animals. Submitted 25 May 1947 at the Pasteur Department (Head: B. G. Vaynberg) of the Institute of Epidemiology and Microbiology imeni I. I. Mechnikov, Odessa.

PA-24T62

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

RYABAYA, O. M.

Mbr., Pasteur Dept., Odessa Inst. Epidemiology & Microbiology im. I. I. Mechnikov, -1947-.
"Suitability of Guinea Pigs for Immunological Experiments on Hydrophobia," Byul. Eksper. Biol.
i Med., 24, No. 4, 1947

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

RYABAYA, S.I.

33

4521* Theory of Corona Under Direct-Current Voltage.
I. Influence of Earth's Surface on Corona of Two Parallel
Conductors. (In Russian) V. I. Popkov and S. I. Ryabaya
Izvestiya Akademii Nauk SSSR (Bulletin of the Academy of
Sciences of the USSR), Section of Technical Sciences, Dec.
1950, p. 1795-1805

The two types of corona present in the case of parallel
conductors bipolar corona between conductors, and unipolar
corona between each of the conductors and the earth were
theoretically studied.

LAYNBURG, D.Ya.; RYABAYA, R.D.

Skin homoplasty in burn disease in children. Gamat. i perel. krovi
1:146-149 '65. (MIRA 18:10)

1. Kiyevskiy institut perelivaniya krovi.

LEVITOV, V.I.; RYABAYA, S.I.

Voltampere characteristics of unipolar corona for an electrode
wire-plate system. Elektroenergetika no.7:22-30 '63.
(MIRA 16:9)

184T39

RYABAYA, S. I.

USSR/Electricity - Transmission, High-
Voltage
Corona

Jan 51

"The Theory of DC Corona," V. I. Popkov, S. I. Rya-
baya, Power Eng Inst, imeni G. M. Krzhizhanovskiy,
Acad. Sci. USSR (1951)

Iz Ak Nauk SSSR, Otdel Tekh Nauk No 1, pp 29-39 1951,

Studies v-amp dependency of corona discharge for
syst of 2 parallel conductors with one grounded.
Presence of grounded conductor increases current of
unipolar corona by 30-50%. Submitted by 8 Jun 50.

184T39

RYABAYA, Yu., bibliotekar'.

Looking for new methods in moral education. Prof.-tekhn. obr. 15
(MIRA 11:6)
no.6:30 Je '58.

1. Remeslennoye uchilishche No.4, Moskva.
(Teaching)

AUTHOR: Ryabaya, Yu., School Librarian 27-58-6-25/35

TITLE: In Search of New Forms of Education (V poiskakh novykh form vospitaniya)

PERIODICAL: Professional'no-Tekhnicheskoye Obrazovaniye, 1958, Nr 6, p 30
(USSR)

ABSTRACT: The author describes how she organized in her school a weekly review of political information and books on science-fiction.

ASSOCIATION: Remeslennoye uchilishche Nr. 4, Moskva (The Moscow Trade School Nr. 4)

Card 1/1 1. Political science-Study and teaching 2. Education-USSR

RYABCHENKO, A. (poselok Tomilino, Moskovskoy oblasti); DEMENT'YEV, G. (Murmansk); RIZUN, I. (Dnepropetrovsk); KRYSHKIN, I. (g. Kasimov, Ryazanskoy oblasti)

Exchange of experience. Radio no. 11:49 N '60. (MIRA 14:1)
(Television)

RYABCHENKO, Aleksandra Tikhonovna; VOLKOV, Yu.N., red.

[Functional disorders of the voice] Funktsional'nye narušenija golosa. Moskva, Meditsina, 1964. 101 p.
(MIRA 17:11)

RYABCHENKO, Avezin, agronom-entomolog; BOGOVIK, I.V., kand.biol.nauk;
ROGACHEV, V.L., starshiy nauchnyy sotrudnik; MARAKULIN, A.I.,
mladshiy nauchnyy sotrudnik; YATSENKO, G.K.; BUPAYS, A.A., agronom-
entomolog; CHIKVILADZE, I.D., kand.sel'skokhozyaystvennykh nauk;
SEMENOV, A.Ye., kand.sel'skokhozyaystvennykh nauk; MANUKYAN, V.V.

Brief reports. Zashch.rast.ot vred.i bol. 4 no.3:54-56 My-Je
'59. (MIRA 13:4)

1. Nachal'nik Pavlodarskogo otryada po bor'be s vreditelyami
(for Ryabchenko). 2. Zaporozhskaya opytnaya stantsiya (for
Rogachev). 3. Bostandykskoye opytnoye pole Uzbekskogo instituta
sadovodstva i vinogradarstva (for Marakulin). 4. Starshiy agronom
Khabarovskoy karantinnoy inspeksi (for Yatsenko). 5. Zaveduyu-
shchiy sektorom sluzhby ucheta i prognozov Ministerstva sel'-
skogo khozyaystva ArmSSR (for Manukyan).

(Plant diseases) (Agricultural pests)

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

ACC NR: AP6018012

(N)

SOURCE CODE: UR/0413/66/000/010/0126/0126

INVENTORS: Lyubavskiy, K. V.; L'vova, Ye. P.; Sukhov, L. V.; Yarovinskiy, L. M.; Tarnovskiy, A. I.; Rynabchenkov, A. V.; Gerasimov, V. I.; Iodkovskiy, S. A.

ORG: none

TITLE: Welding electrode. Class 49, No. 181968 [announced by Scientific Research Institute of Technology and Machine Construction (Nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 126

TOPIC TAGS: welding, welding electrode, austenite steel, carbon, silicon, manganese, chromium, nickel, molybdenum, niobium, sulfur, phosphorus

ABSTRACT: This Author Certificate presents a welding electrode for welding austenite steels containing carbon, silicon, manganese, chromium, nickel, molybdenum, niobium, sulfur, and phosphorus. To increase the resistance of welded seam to corrosion, the electrode composition is taken in the following percent relationship: carbon—not over 0.05; silicon—not over 0.45; manganese 2—10; chromium 19—25; nickel 33—50; niobium 0.8—1.2; molybdenum 2.5—7.5; sulfur or phosphorus—not over 0.02 of each.

SUB CODE: 13/ SUBM DATE: 29Apr65

Card 1/1

UDC: 621.791.042.2

Rybachenkov, A. V.

PHASE I BOOK EXPLANATION

BOR/555

"Vsesoyuznyj sovet nauchno-tekhnicheskikh obshchestv"

Metallurgicheskaya korroziya i korroziya metallov v naychno-tekhnicheskikh obshchestvakh

(Intermetallics and Stress Corrosion of Metals) Moscow, Naukova, 1960.

558 p., 3,000 copies printed.

Ed.: I.A. Lervin, Candidate of Technical Sciences; Ed. of Publishing House:
Literature on Metallurgy, Enginnering and Instrument Making (Moscow); V.D. Klimov, Publishing Ed. for
Business, Editorial Board: I.A. Lervin, Candidate of Technical Sciences; V.V. Rukavishnikov,
(Chairman), V.P. Astanin, Candidate of Technical Sciences; V.M. Nikitina,
Candidate of Technical Sciences, and A.V. Turchinskaya, Candidate of Technical
Sciences.

PURPOSE: This collection of articles is intended for technical personnel concerned
with problems of corrosion of metals.

CONTENT: The collection contains discussions of intercrystalline corrosion of
stainless steels and stress corrosion of carbon steel, low-alloy and stainless
steel, and light-weight and nonferrous alloys. The mechanisms of stress
corrosion cracking under different conditions of stress, the nature
and the nature of corrosion and corrosion cracking is analyzed. No generalities
are mentioned. Most of the articles are accompanied by bibliographic references,
the authority of which are Soviet.

**Dmitriev, I. Ya., Candidate of Technical Sciences, and I.A. Rukavishnikov,
Engineer, Rapid Method of Determining the Tendency of Steel to Stress
Corrosion Intermetallics Corrosion.**

162

III. STRESS CORROSION OF STAINLESS STEELS

**Sokolovskiy, A.V., Doctor of Chemical Sciences, Professor, and
T.Yu. Miroshnikov, Senior Scientist, Candidate of Technical
Sciences, The Role of Electrochemical Factors in the Process of
Stress Corrosion of Austenitic Steels**

179

**Ivanov, D. Isaev, Candidate of Technical Sciences, and P.M. Klyushnikov,
Doctor Scientific Worker, Effect of Various Environments on the Stress
Corrosion of Austenitic Steels at Supercritical Pressures**

183

**Slivnenko, V.A., Candidate of Technical Sciences (Deceased), Stress
Corrosion of Metals in Nuclear-Reacting Equipment**

200

**Tsvetkov, V.N., I.B. Kryzhev, Candidate of Technical Sciences, and
O.I. Reznichenko, Relatively Unreactive Metal Steels to Corrosion**

211

**Astaf'ev, V.Z., Candidate of Technical Sciences, Corrosion Cracking of High-
Strength Steel**

211

**Fedorov, D.P., Candidate of Technical Sciences, Corrosion of Carbon
Steel in Sodium Nitrite Solutions**

221

**Tutty, V.A., Candidate of Technical Sciences, The Effect of Hydrogen
Stresses on Steel on Its Endurance**

231

**Kritskiy, M.M., Corrosion Checking of Welding Equipment Made of Carbon
Steel in Hydrogenated Gases**

231

**Podgor, O.O., Efremov, A.I., Cherkas, Candidate
of Technical Sciences, and I.D. Zakharenko, Engineer, Cracking of
Safety Valve Springs in Contact with Unstabilized Gases and
Unquoted Gases**

269

RYABCHEKOV, A. V.

25589

Antikorrozionnoye Azotirovaniye.

V SB: Korroziya Zashchita

Ot Korrozii I Elektroliz. M.,

1948, S. 5-47., - Bibliogr: 27 Nazv.

SO: LETOPIS NO. 30, 1948

RYABCHEKOV, A. V.

25589. RYABCHEKOV, A. V.

Antikorrozionnoye azotirovaniye. V sb: Korroziya Zashchita ot Korrozii i Elektroliz. M., 1948, s. 5-47. - Bibliogr: 27 Nazv.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

RYABCHENKO, A. I.
I. E. ADADUROV, ZhPKh 7, 1355-62, 1934

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

RYABCHENKO, A.S.

Origin of loess and loess-like rocks of the Russian Platform
in the light of mineralogical data. Biul. MOIP. otd. geol. 32
no.2:159 Mr-Ap '57. (MIRA 11:3)
(Loess)

RYABCHENKOV, A.S.

Origin of loesslike rocks in the Donets Ridge. Vop.
gidrogeol. i inzh.geol. no.19:125-135 '61. (MIRA 15:2)
(Donets Ridge—Loess)

RYABCHENKO, A.T., cand. med. Sci. -- (diss) *"On the problem of treatment of patients with functional disturbance of the voice (aphonia and dysphonia)"* Msc, 1958. 12 pp. (Min of Health USSR. Central Inst for the Advanced Training of Physicians), 200 copies (KL-46-30, 1:3)

- 67 -

RYABCHENKO, A.T.

Application of ultrahigh frequency current in the treatment of acute suppurative otitis. Vest. otorinolar., Moskva 15 no.2:49-52 Mar-Apr 1953.
(CLML 24:3)

1. Scientific Associate. 2. Of the Clinical Division (Head -- Doctor Medical Sciences A. A. Atkarskaya) of the Scientific-Research Institute of the Ear, Throat, and Nose of the Ministry of Public Health RSFSR (Director -- Honored Worker in Science Prof. V. K. Trutnev).

18(7) Ryabchenko, A. V.

PHASE I BOOK EXPLOITATION

SOV/2296

Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya
Korroziya i zashchita metallov v mashinostroyenii (Corrosion and Protection
of Metals in the Machine-building Industry) Moscow, Mashgiz, 1959. 347 p.
(Series: Its: [Sbornik] kn. 92) 3,500 copies printed.

Ed.: A. V. Ryabchenkov, Doctor of Chemical Sciences, Professor; Ed. of Publishing House: A. I. Sirotin, Engineer; Tech. Ed.: B. I. Model'; Managing Ed. for Literature on Heavy Machine Building (Mashgiz); S. Ya. Golovin, Engineer.

PURPOSE: This collection of articles is intended for designers, technologists, and industrial and research workers concerned with corrosion and corrosion protection of metals.

COVERAGE: This collection of articles deals with problems of corrosion and metal protection under investigation at TsNIIIMASH during the past two years. The articles discuss stress corrosion, intergranular corrosion, scale and heat resistance of austenitic steels in gaseous media, protective coating, fretting corrosion, and resistance of metals to cavitation. No personalities are

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Corrosion and Protection (Cont.)

SOV/2296

mentioned. References follow each article.

TABLE OF CONTENTS:

PART I. STRESS CORROSION AND INTERGRANULAR CORROSION OF METALS

Ryabchenkov, A.V. [Doctor of Chemical Sciences, Professor], V.M. Nikiforova [Candidate of Technical Sciences], and V.F. Abramova [Engineer]. Methods of Microelectrochemical Investigation of Stress Corrosion of Metals

The authors developed instruments and a method for determining electrode potentials of metal structural components and electrochemical heterogeneity of a metal surface under tension in an electrolyte solution.

Ryabchenkov, A. V., and V.M. Nikiforova. Role of Electrochemical Factors in the Process of Corrosion Cracking of Austenitic Steels

The authors study the cracking of high-alloy austenitic steels under the simultaneous effect of static tensile stresses and the corrosive medium of an electrolyte solution.

Sidorov, V.P. [Engineer], and A.V. Ryabchenkov. Investigating the Effect of Certain Factors on the Corrosion Cracking of Austenitic Boiler Steels

The authors discuss the methods employed as well as the effects of mechanical stresses, of composition and concentration of solutions, of temp-

Card 2/7

corrosion and Protection (Cont.)

SOV/2296

Kestel', L.P., and Ye.A. Davidovskaya. Effect of a Concentration of Sulphur Dioxide and Steam on the Corrosion of Austenitic Steels at High Temperatures

109

Davidovskaya, Ye.A. Long-time Rupture Strength of Alloy Steels in Superheated Steam

125

The author investigates the behavior of EYalt and EI724 steels under the effect of steam at 575° to 610°C.

Maksimov, A.I. [Engineer], P.V. Sorokin [Engineer], and S.G. Vedenkin, [Professor]. Effect of Corrosive Gas Media on Long-time Rupture Strength of Austenitic Sheet Steels

139

The present investigation was made by the authors to determine the effect of fuel combustion products on three different cast steels used in gas turbine construction.

Nikiforova, V.M., N.A. Reshetkina, and V.S. Smurov [Engineer]. Study of Decay and Corrosion Resistance of Various Materials for Carbon Bisulfide Retorts Under Operating Conditions

158

The authors make recommendations for the most suitable metals for inner and outer linings of carbon bisulfide retorts.

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Corrosion and Protection (Cont.)

SOV/2296

Rykova, A.V., and Ye.I. Rudaya. Zinc Phosphate Electroplated Covering and Its Protective Properties

232

The authors obtained zinc phosphate deposits from acid and alkali electrolytes. They describe the properties and characteristics of these deposits.

Rykova, A.V., I.A. Bulatov [Engineer], and D.M. Vedeneyev [Technician]. Chrome-plating Large Plates

238

The authors describe the experimental sectional chrome plating of 6000 x 1500 x 50 mm. plate by means of conventional industrial generators.

Rykova, A.V., and V.P. Osipova [Engineer]. Electroplating for Protection of Equipment in Tropical Climate (Survey of Non-Soviet Research)

244

Leskov, A.E. [Engineer]. Protective Scale-resistant Ceramic Coating (Survey of Literature)

261

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"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

RYABCHENKO, D.V.

Effect of angular and free linear contours on the distribution
of stresses in a half plane under the action of a concentrated
load. Nauch.sooob. IGD 22:43-56 '63. (MIRA 17:5)

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

ACC NR: AR7001772 SOURCE CODE: UR/0169/66/000/010/D018/D018

AUTHOR: Pakhomov, I. B.; Ryabchenko, F. M.; Bystritskaya, P. M.;
Shestyuk, V. A.; Filatov, K. Ye.

TITLE: Regional works of correlation method of wave refraction (CMWR) in the
trans-Volga region of Saratov

SOURCE: Ref. zh. Geofizika, Abs. 10D111

REF SOURCE: Tr. Nizhne-Volzhsk. n.-i. in-t geol. i geofiz. vyp. 3, 1965,
156-165

TOPIC TAGS: seismic prospecting, seismograph, seismology, hodograph, wave
refraction data correlation, seismic station/SPEN-1 seismograph, PSL-1 CMWR
seismic station, Ural-2 electric power machine

ABSTRACT: A description is given of the method of field observations and interpretations and results of surveys made since 1958 in the border area of the Caspian depression. A study was made of the topography of the basement in order to find large outcroppings and structures of the subsalt stratum and upheavals of the platform type. The seismological characteristics of the region are presented. The

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UDC: 550.834.3

ACC NR: AR7001772

methodology of refraction correlation observations consisted in a continuous longitudinal profiling with a system of counter and overtaking hodographs, which ensured a complete correlation of reference waves, and also in a nonlongitudinal profiling, used only for mapping of the basement relief. In longitudinal profiling, each 5.7 and 11.4 km long station was surveyed from 13—15—21 explosion points. The hodographs were 30 km long and in the area of tracking of the refracted wave, they were 70 km long. On nonlongitudinal profiles, the station was 11.4 km long, and the distance from the explosion point to the profile (on the perpendicular) was 50—60 km. Waves were recorded by SPEN-1 seismographs (100 m from each other) and a 60 channel PSL-1 refraction correlation station with a filtration opening toward Hr, and with a steep right cut of the 27-cps frequency curve. On the territory of the trans-Volga area of Saratov, four main waves were found:— T₁ from the surface of the salt; T₂ from the subsalt bed to the depression; T₃ from the surface of the basement (?); T₄ from the interface in the thickness of the basement (?) [SIC]. Structural diagrams over two horizons were composed: The surface of the carbonaceous sediments of Lower Permian age, which has a monoclynal dip to the South and the South East toward the Caspian depression; the surface of the basement, characterized by a rather sharp dislocation with a general dip to the

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ACC NR: AR7001772

South. On the whole, the outer part of the border zone shows an irregular dip of the basement toward the Caspian depression, while the inner part is a salt dome tectonic formation. T. Polyakova. [Translation of abstract] [GC]

SUB CODE: 08/

Card 3/3

1. V. K. ARIBDZHANOV, G. RYABCHENKO, Eng.
2. USSR (600)
4. Baking
7. Experience of master V. K. Aribdzhanyov. Moloch. prom. 14 no. 2. 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1

RYABCHENKO, G.V.

Homemade hygrometer. Geog. v shkole 20 no.5:60 S-O '57.

(MIRA 10:12)

1. Shkola No.36 g. Tikhoretska.
(Meteorological instruments)

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001446220010-1"

RYABCHENKO, I.K.

Plant protection in Pavlodar Province. Zashch. rast. ot vred.
1 bol. 6 no.11:4-5 M '61. (MIRA 16:4)

I. Direktor stantsii zashchity rasteniy Pavlodarskoy oblasti.
(Pavlodar Province—Plants, Protection of)

RYABCHENKO, I. M.

20818. Ryabchenko, I. M. Daozhzi dlya shampanskogo proizvodstva: Trudy Krasnodarsk. in-ta pishch. prom-sti, vyp. 3, 1948, s. 237-43.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

RYABCHENKO, I.M.

Kuban Agricultural Institute.

"Concerning the method of continuous selection of microorganisms from production;"
SO: MIKROBIOLOGIA, Vol. 20, Vol. 1, Jan/Feb 52.

RYABCHENKO, I.M.

Method of continuous selection of microorganisms from industry.
Mikrobiologija, Moskva 21 no.1:77-82 Jan-Feb 1952. (CLML 22:1)

1. Kuban' Agricultural Institute.

RYABCHENKO, I. N., GUBANOV, YA. V.

Bacteria, Nitrifying

Use of Azotobacter for increasing yield of
wheat in Krasnodar Territory. Sov. agron.
10 no. 4:73-74 Ap '52.

Monthly List of Russian Accessions, Library of Congress, July 1952. UNCLASSIFIED.

AGABAL'YANTS, G.G.; IVLEV, P.F.; NYABCHENKO, I.M.

Nature of sherry yeast. Izv.vys.uchob.zav.; pishch.tekh. no.1:
63-72 '59. (MIRA 12:6)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra
tekhnologii vinodeliya.
(Yeast)

AGABAL'YANTS, G.G.; IVLEV, P.F.; RYABCHENKO, I.M.

Antagonism between yeasts. Trudy KIPP no.22:266-273 '61.
(MIRA 16:4)

(Antibiosis) (Yeast) (Wine and winemaking)

Vine Poole, Belmont Inst.

RYABCHENKO, I.Ya.; SIDEROV, A.P., dots., otv. red.; KOTLYAROV, Yu.L.;
SARANYUK, T.V., tekhn. red.

[Modern forms and advanced methods for the adoption of the
manufacture of new machinery designs] Sovremennye formy i prog-
ressivnye metody osvoenija proizvodstva novykh konstruktsii ma-
shin. L'vov, Izd-vo L'vovskogo univ., 1963. 93 p.
(MIRA 16:6)

(Machinery industry—Management)

IVANCHENKO, S.T., kand.ekon.nauk; RYABCHENKO, I.Ya., kand.tekhn.nauk;
STARKOV, N.I.

Improving the planning of coal costs. Ugol' Ukr. 4 no.12:36-37 D
'60. (MIRA 13:12)

(Coal--Costs)

RYABCHENKO, I. YA.

"Technological Appropriateness of Design, and Its
Importance for Speeding Up the Mastering of New Machinery." Min Higher
Education USSR, L'vov Polytechnical Inst, L'vov, 1955. (Dissertation
for the Degree of Candidate in Technical Sciences)

SO: M-955, 15 Feb 56

IVANNIK, B.P.; KLIPOV, N.A.; MAMEDOVA, T.G.; RYABCHENKO, N.I.; SKLOBOVSKAYA,
M.V.; YASKEVICH, A.G.

Molecular mechanisms underlying radiation-induced cytogenetic
disorders. Vest. AMN SSSR 20 no.2 18-22 1985. (MIRA 18:II)

1. Institut meditsinskoy radiobiologii AMN SSSR, Obrninsk.

RYABCHENKO, N. I., SOKOLOVA, T. D., TSEYTLIN, P. I., SPITKOVSKI, D. M.,
USAKOVSKAYA, T. S., GOLUBEVA, G. P. (USSR).

Structural Lability of Deoxyribonucleic Acids and Deoxyribonucleoproteins as a
function of their Molecular Morphology.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

42058

S/219/62/000/011/002/002
B144/B186

27.12.0

AUTHORS:

Ryabchenko, N. I., Tseytin, P. I., Yaskevich, A. G.

TITLE:

Study of local radiation injuries in DNA by thermal separation of the double helix

PERIODICAL: Byulleten' eksperimental'noy biologii i meditsiny, no. 11,
1962, 51 - 54

TEXT: The effect of irradiations on the DNA macromolecule was studied on the basis of the degradation kinetics and viscosity of its one-strand structures. A double-helix DNA ($N/P \approx 1.64 - 1.68$; $E(P) = 6500 - 6700$; molecular weight $= 7 \cdot 10^6 - 8.5 \cdot 10^6$) was obtained from calf thymus and x-ray irradiated with 5000 r/min . UV irradiation lasted for 5 min, dose $4.7 \cdot 10^4 \text{ erg/min} \cdot \text{mm}^2$. One-strand DNA was obtained at 88°C by the method of P. Doty et al. (Proc. nat. Acad. Sci. (Wash.), 1960, v. 46, p.461). The number of strands was calculated from $\log \eta / \log R$ divided by $-d$, where η is the viscosity, R the x-ray dose in r , and d the exponent in the Staudinger equation. Since the number of chains, n , was ~ 1 in irradiated and

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S/219/62/000/011/002/002

B144/B186

Study of local ...

non-irradiated structures, it is assumed that x-ray irradiation does not cause thermostable crosslinking. UV irradiation inhibited the separation of the strands, owing to crosslinking. These results agree closely with the viscosity data obtained with different electrolytes and temperatures. When the Na^+ ion concentration is increased from 0.01 to 0.2 M, the one-strand DNA from irradiated as well as non-irradiated DNA coils up, and the viscosity decreases by 20 - 30 times. When the temperature in 0.2 M Na^+ is raised from 25 to 70°C, the viscosity increases by a factor of 3.0-3.7. The viscosity of the irradiated one-strand DNA is, however, 3-4 times lower than that of the non-irradiated; this is apparently due to solitary breaks in the chains. The effects of increased temperature and ion concentration in UV irradiated one-strand DNA were much less marked. There are 1 figure and 1 table.

ASSOCIATION: Institut eksperimental'noy biologii AMN, SSSR (Institute of Experimental Biology AMS USSR (I. N. Mayskiy, Professor, Director); Institute meditsinskoy radiologii AMN SSSR (Institute of Medical Radiology AMS USSR, Moscow (G. A. Zedgenidze, Member of the AMS USSR, Director)

Card 2/3

Study of local ...

S/219/62/000/011/002/002
B144/B186

PRESENTED: by N. N. Zhukov-Verezhnikov, Member of the AMS USSR

SUBMITTED: February 20, 1962

Card 3/3

L 17043-63

AFWL AR/K

EWT(m)/BDS/ES(j) AFFTC/ASD/

S/205/63/003/002/001/024

AUTHORS: Ryabchenko, N. I., and Tseytlin, P. I.58
5CTITLE: Study of radiation damage of DNA by thermal splitting of threads.
1. Analysis of local damage to DNA caused by ionization radiation

PERIODICAL: Radiobiologiya, v. 3, no. 2, 1963, 153-158

19

TEXT: The article deals with further development of application of thermal separation of threads method to the analysis of local damage of DNA molecules, which occur as a result of X-ray radiation. The DNA was obtained from calf thymus. To answer the question regarding formation of absence of interstitchings during irradiation of DNA and regarding distribution of breaks in DNA threads, natural DNA was irradiated in $0.01 \text{ M} \text{Na}^+$ with different doses and after irradiation the separation of threads was conducted by heating the samples at 89°C for 15 min. with subsequent rapid cooling. The intrinsic viscosity (η_z) was then measured. The viscosity was measured with low-gradient Ostwald viscosimeter with subsequent extrapolation to 0 gradient and 0 concentration. It was found that degradation of each thread in the composition of natural DNA is described by the law of chance. The probabilities were determined for single breaks without and in the presence of protective substances. The article contains 3 figures, 1 table and an 18-item bibliography.

Card 1/2

L 17043-63

8/205/63/003/002/001/024

Study of radiation.....

2

ASSOCIATION: Institut experimental'noy biologii AMN SSSR (Institute of Experimental Biology of the Academy of Medical Sciences of the USSR) and Institut meditsinskoy radiobiologii AMN SSSR (Institute of Medical Radiobiology of the Academy of Medical Sciences of the USSR), Moscow

SUBMITTED: July 21, 1962

Card 2/2

L 11234-63

EWT(1)/EWT(m)/BDS--AFFTC/ASD--RM/AR/K

ACCESSION NR: AP3001056

S/0205/63/003/003/0331/0335

58

56

AUTHOR: Ryabchenko, N. I.; Tseytlin, P. I.

TITLE: Investigation of radiation damage of DNA by thermal separation of strands.
2. Effect of ionizing and ultraviolet radiation on separation of two-strand DNA

SOURCE: Radiobiologiya, v. 3, no. 3, 1963, 331-335

TOPIC TAGS: DNA, ionizing radiation, ultraviolet radiation, macromolecule denaturation

ABSTRACT: In earlier studies the effects of x-rays and ultraviolet rays on the kinetics of breaks and cross-linking in irradiated DNA were investigated by thermal separation of DNA strands. [Abstracter's note: Russian term "tyazh" translated as "strand".] But the effect of breaks and cross-linking on the kinetics of DNA strand separation was not studied. In this investigation, both irradiated and non-irradiated DNA preparations were heated at different temperatures, quickly cooled, and then the flexibility factor and temperature viscosity rise were determined for each. Figure 1 shows the effect of heating on irradiated and non-irradiated DNA solutions. X-ray irradiation of DNA does not affect the separation of its strands. The transition from rigid two-strand DNA to flexible one-strand DNA takes place abruptly the

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L 11234-63

ACCESSION NR: AP3001056

2

same as for non-irradiated DNA. Ultraviolet irradiation of DNA prevents its strands from separating. Data on kinetics of thermal separation of irradiated DNA indicate that DNA macromolecules are subjected to denaturation disturbances. Orig. art. has: 3 figs., 1 table, 2 formulas.

ASSOCIATION: Institut eksperimental'noy biologii i Institut meditsinskoy radiologii AMN SSR, Moscow (Institute of Experimental Biology and Institute of Medical Radiology, AMN, SSSR)

SUBMITTED: 21Jul62

DATE ACQD: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF Sov: 006

OTHER: 014

ch / Wm
Card 2/2

RYABCHENKO, N.I.; SPITKOVSKIY, D.M.; TSEYTLIN, P.I.; Prinimala
uchastiye YASKEVITCH, A.G., studentka

Some physicochemical aspects of single-strand DNA. Biofizika
8 no.1:19-27 '63. (MIRA 17:8)

1. Institut eksperimental'noy biologii AMN SSSR, Moskva i
Institut meditsinskoy radiologii AMN SSSR, Moskva.

ACCESSION NR: AP4015077

S/0205/64/004/001/0003/0009

AUTHOR: Tscytlin, P. I.; Yaskovich, G. P.; Ryabchenko, N. I.

TITLE: Effect of ionizing radiation on the hydrogen bond system of DNA macromolecules

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 3-9

TOPIC TAGS: ionizing x-irradiation effect, DNA macromolecular structure, DNA hydrogen bonds, DNA thermostability, radiation dose, DNA melting temperature, double strand DNA

ABSTRACT: This study of DNA macromolecular structure thermostability is based on the literature and on investigation of DNA solutions. DNA solutions (0.008%) were vibrated at 10 kc and x-irradiated in 0.2M NaCl with doses ranging from 12 to 59 kr. Hydrogen bond system damage in DNA solutions was determined spectrophotometrically by absorption value changes. Melting temperature curves served as thermostability indices. Findings show that radiation doses may markedly reduce DNA melting temperatures without affecting DNA absorption values at room temperature. With increased radiation doses,

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ACCESSION NR.: AP4015077

the DNA melting temperature profile deteriorates. Melting temperature decrease is a linear function of the radiation dose. Irradiation breaks down DNA hydrogen bonds into several double strand DNA parts independent of one another. These DNA parts melt at lower temperatures because of reduced molecular weight (100,000 or less). Orig. art. has: 5 figures, 1 table.

ASSOCIATION: Institut eksperimental'noy biologii AMN SSSR, Moscow (Institute of Experimental Biology, AMN SSSR); Institut meditsinskoy radiologii AMN SSSR, Obninsk (Institute of Medical Radiology, AMN SSSR)

SUBMITTED: 17Jul63

DATE ACQ: 12Mar64

ENCL: 00

SUB CODE: LS

NO REF SOV: 006

OTHER: 015

Card 2/2

RYABCHENKO, N.I.; BRAGINSKAYA, F.I.; EL'FINER, I.Ye.; TSEYTLIN, P.I.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001446220010-1"
waves. Biophysika 9 no.2:162-167 '64.
(MIRA 17:12)

1. Institut eksperimental'noy biologii AMN SSSR, Moskva i Institut
biologicheskoy fiziki AN SSSR, Moskva.

TOMAUR, A.P.; KALOCHENKO, N.I.; PASYNSKIY, A.G.; RSEYTLIN, P.I.

Electron microscopic study of the flexibility of single-strand and double-strand (native and denatured) forms of DNA. Radiobiologija 5 no.3:330-333 '65. (KEM 13:7)

1. Institut biokhimii imeni Bakha AN SSSR i Institut eksperimental'noy biologii AMN SSSR, Moskva.

L 14157-66 EWA(h)/ EWP(j)/EWT(m)/EWA(1) RM/JK
ACC NR: AP6001311 SOURCE CODE: UR/0248/65/000/009/0018/0022

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001446220010-1
AUTHOR: Ivannik, B. P.; Klipson, N. A.; Mamedova, T. G.; Ryabchenko,
Sklobovskaya, M. V.; Yaskevich, A. G. 64 B

ORG: Institute of Medical Radiology, AMN SSSR, Obninsk (Institut meditsinskoy radiologii AMN SSSR) 19

TITLE: Molecular mechanisms underlying radiation-induced cytogenetic injuries

SOURCE: AMN SSSR. Vestnik, no. 9, 1965, 18-22

TOPIC TAGS: free radical, radiation injury, ionizing radiation, UV radiation, DNA

ABSTRACT: The nature of the injuries produced by different forms of free radicals and by radiation at the cellular and molecular levels is investigated and the local injuries to DNA and DNP are described. The damage to the basic matrix structure of the cell nucleus following ionizing radiation is secondary to the cell's direct absorption of radiant energy. This damage cannot be duplicated by the action of free radicals or ultraviolet radiation. There is a difference between the primary physicochemical changes in DNA and DNP arising from ionizing radiation, free radicals,

UDC: 612.014.22].24-06 : 612.014.482+612.014.482 : 612.014.22].24

L 14157-66
ACC NR: AP6001311

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or from ultraviolet rays. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 06/ SUBM DATE: 05Jun65/ ORIG REF: 005/ OTH REF: 003

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L 31194-66 EWP(j)/EWT(m) RM
ACC NR: AP6022568

SOURCE CODE: UR/0216/66/000/002/0197/0210

53

AUTHOR: Tseytlin, P. I.; Spitkovskiy, D. I.; Gorin, A. I.; Ivannik, B. P.;
Kulikova, L. G.; Luchkina, L. A.; Martynov, E. V.; Ryabchenko, N. I.; Usakovskaya, T. S.

ORG: Institute of Experimental Biology, AMN SSSR, Moscow (Institut-eksperimental'noy
biologii AMN SSSR)

TITLE: Analysis of radiation injury to deoxyribonucleoproteins at the molecular and
supramolecular levels

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 2, 1966, 197-210

TOPIC TAGS: radiation injury, protein, DNA, x ray irradiation, hydrogen bonding,
molecular structure

ABSTRACT: X-irradiation does not give rise to covalent crosslinks within
the DNA macromolecule, i.e., it does not prevent the separation of DNA
strands or interfere with its replication. The authors' studies on optic
rotation of DNA and DNP and melting curves indicate that irradiation causes
latent damage to the system of hydrogen bonds. The formation of single
breaks in the polynucleotide skeleton may result in rotation around the
remaining single bond at the site of the break. This may produce local
change in the configuration of the DNA macromolecule, resulting in steric
hindrance between the DNA and corresponding protein molecule.

Irradiation with doses below 10^3 rad causes breaks only in a small
number of DNA molecules. This does not alter the physicochemical properties
of the DNA or DNP as a whole, although it undoubtedly has some biological
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ACC NR: AP6022568

effect. Thus, there is no reason to believe that the effects of low irradiation doses, as manifested in structural rearrangements of chromosomes, are related to changes in the DNA macromolecules. The results of studies on the physicomechanical properties of supramolecular oriented DNP structures present in a medium with physiological ionic strength indicate that these formations are highly sensitive to radiation. Orig. art. has: 10 figures. [JPRS] O

SUB CODE: 07, 06, 20 / SUBM DATE: 18Dec65 / ORIG REF: 013 / OTH REF: 013

Card 2/2 1C

TSEYTLIN, P.I.; SPITKOVSKIY, D.M.; RYABCHENKO, N.P.

Relation between the molecular morphology of desoxyribonucleic acid macromolecules and their radiosensitivity; radiosensitive and radio-resistant forms of desoxyribonucleic acid. Biofizika 5 no. 4:393-397 '60. (MIRA 13:12)

1. Institut eksperimental'noy biologii AMN SSSR, Moskva.
(DESOXYRIBONUCLEIC ACID) (RADIATION-PHYSIOLOGICAL EFFECT)

KUDRYASHOV, Yuriy Borisovich. Prinimali uchastiye: KOZLOV, Yu.P.;
SUMARUKOV, G.V.; TOLKACHEVA, Ye.N.; RYABCHENKO, N.V.; TARUSOV, B.N., red.;
CHERKASOVA, V.I., red.; MURASHOVA, V.A., tekhn. red.

[Laboratory work in general biophysics in eight volumes]
Praktikum po obshchei biofizike v vos'mi vypuskakh. Pod
obshchei red. B.N.Tarusova. Moskva, Vysshiaia shkola.
No.7. [Radiobiology; radiation injury of biological objects
under the effect of a single whole body X-ray or gamma ir-
radiation] Radiobiologija; luchevoe porazhenie biologicheskikh
ob"ektov pri deistvii obshchego odnokratnogo rentgenovskogo
ili gamma-oblucheniia. 1962. 273 p. (MIRA 16:4)
(RADIOBIOLOGY—LABORATORY MANUALS)

1492872

DOCUMENT : USSR
CATEGORY : Animal and Specialized Zoology. Insects.
Harmful insects and acarids. P
ART. NO. : 220010, N. 23, 1958, No. 1052/3
AUTHOR : Rybachenki, P.
TITLE : Control of Apple-tree Scale Insects
AVAIL. PERIOD : Jan.-July 1958, No. 5, 53-59.

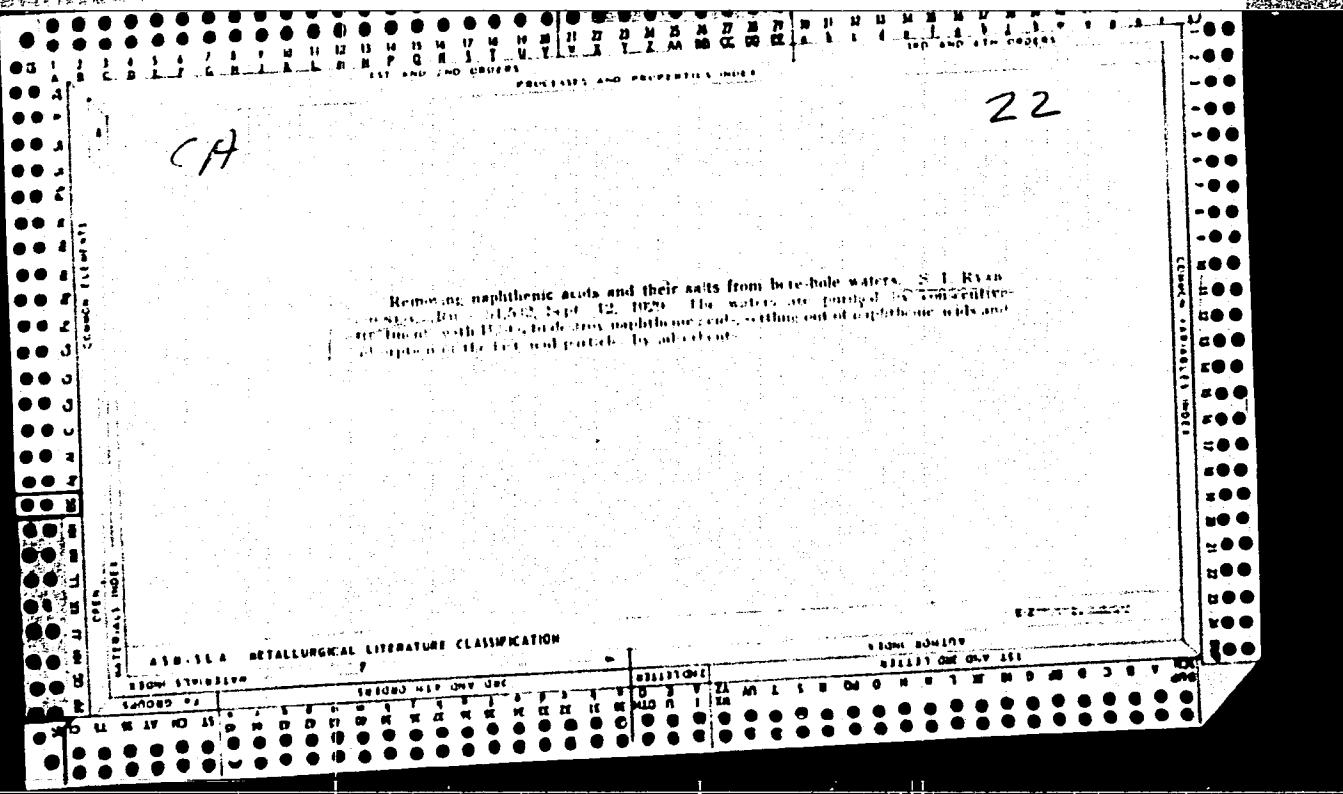
ABSTRACT : no abstract

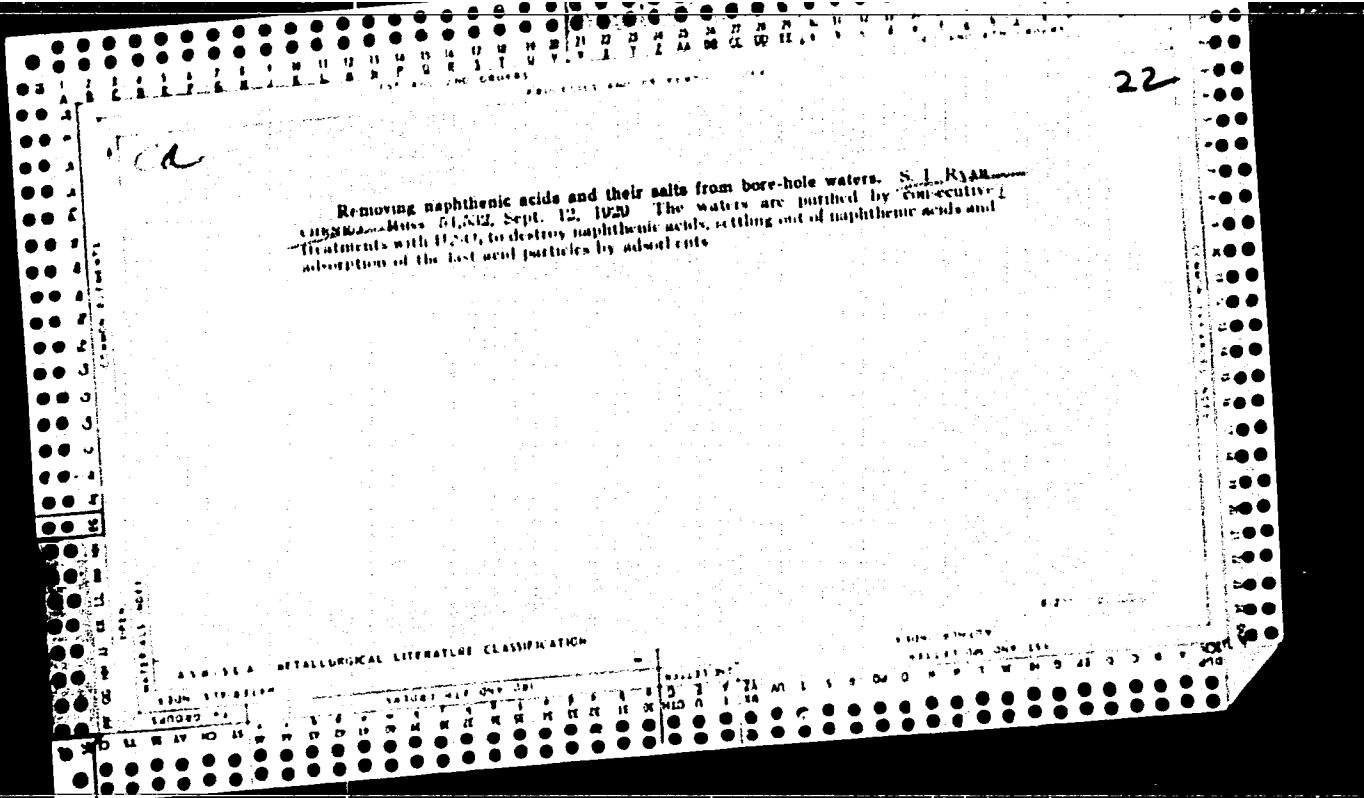
Cord: 1/1

CHEREMOVSKIY, Yuriy Ivanovich; SIDOROV, Fedor Georgiyevich; MIKHAYEV,
Nikolay Zakharovich; PICHAK, Fedor Ivanovich; ALEKSEYEV, Georgiy
Petrovich; KHARITONCHIK, Ye.M., prof., retsentent; CHERMENNOV,
V.M., inzh., retsentent; RYABCHENKO, P.G., inzh., retsentent;
KALOSHIN, A.I., inzh., retsentent; PICHAK, F.I., kand.tekhn.nauk,
red.; YERMAKOV, N.P., tekhn.red.

[Manual for tractor drivers] Posobie traktoristu. Izd.2., perer.
i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,
1960. 592 p. (MIRA 13:12)

(Tractors)





ACC NR: AP/005839.

SOURCE CODE: UR/0181/66/003/012/3541/3549

AUTHOR: Konovalov, V. I.; Ryabchenko, S. M.

ORG: Institute of Physics, AN UkrSSR, Kiev (Institut fiziki AN UkrSSR)

TITLE: Some questions in the broadening of EPR lines in weak fields

SOURCE: Fizika tverdogo tela, v. 8, no. 12, 1966, 3541-3549

TOPIC TAGS: epr spectrum, spectral line, line broadening, wave function, spin system, dipole interaction

ABSTRACT: To determine the conditions for correct application of the theory to the reduction of the experimental data, the authors calculate, in the high-temperature approximation, the zeroth and second moments of the satellites of the EPR absorption curve at constant frequency ν_0 , with inclusion of first-approximation corrections to the wave functions and to the energy levels of the spin system, in the presence of dipole-dipole and exchange interaction. The second moment of the envelope curve, which takes into account all the transitions in the first approximation, is also calculated. The additional contribution to the transition at the fundamental frequency, from the nonsecular part of the perturbation, is determined. The results are not applicable in the entire region of weak fields, but only in the so-called intermediate fields, where perturbation theory is still valid. The ratio of the second moment of the envelope curve to the second moment of the fundamental line for a polycrystalline sample was found to be $4/3$ at constant fundamental frequency. The first moment of

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ACC NR: AP6024490

SOURCE CODE: UR/0181/66/008/007/2213/2217

AUTHOR: Ryabchenko, S. M.; Shul'man, L. A.

41
38

ORG: Institute of Physics AN UkrSSR, Kiev (Institut fiziki AN UkrSSR)

B

TITLE: Influence of strong exchange interaction in $\text{CuCl}_2 \cdot 2\text{H}_2\text{O}$ crystal on the EPR line broadening

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2213-2217

TOPIC TAGS: copper compound, chloride, epr spectrum, line broadening, exchange interaction

ABSTRACT: The effect of the exchange interaction on the EPR line broadening was investigated by the method of moments. The exchange interaction is assumed to exceed the Zeeman interaction. The measurements were made at 9320 Mcs at 300, 77, and 20.4K, and the exchange constants were evaluated for the three temperatures. The second and fourth moments of the EPR absorption curve were then calculated, from which the isotropic exchange interaction with the ion in the second coordination sphere is estimated to be 3×10^{-17} erg. The values of coefficient of anisotropic exchange interaction with the ion of the first coordination sphere were calculated from the second and from the temperature-dependent first moments of the absorption curve, and found to be $J_{aa} = -2.6 \times 10^{-17}$, $J_{bb} = -2.3 \times 10^{-17}$, and $J_{cc} = +4.8 \times 10^{-17}$ erg. The

Card 1/2

BAYSA, D.F.; RYABCHENKO, S.M.

Transducer for a nuclear quadrupole resonance spectrometer in
the 130-320 mc range for low-temperature measurements. Prib.
i tekhn. eksp. 8 no.4:107-109 Jl-Ag '63. (MIRA 16:12)

1. Institut fiziki AN UkrSSR.

L 17328-63
Ps-4/Pr-4/Pu-4 WW

EPR/ENT(d)/ENT(1)/EPF(c)/ZPF(n)-2/HDS AFFTC/ASD/IJP(C)/SSU

ACCESSION NR: AP3004900

S/0120/63/000/004/0107/0109 77

73

AUTHOR: Baysa, D. F.; Ryabchenko, S. M.TITLE: Primary detector for a nuclear-quadrupole-resonance spectrometer for
130-320-Mc band and for low-temperature measurements

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1963, 107-109

TOPIC TAGS: primary detector, spectrometer, nuclear-quadrupole-resonance
spectrometer, low-temperature measurementABSTRACT: A push-pull regenerative and superregenerative oscillator-detector
is described that has resonant circuits in its two-conductor lines. The oscillator
is mounted integral with a preamplifier and a double-modulation-frequency elec-
tronic filter. A design drawing of a cryostat used for low-temperature measure-
ments is supplied. One liter of hydrogen is evaporated in 4.5 to 5 hrs in the
cryostat which ensures 1-1.5-hr continuous work period. The fact that each

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